

REMARKS

By this amendment, applicants have amended the specification to insert appropriate headings therein, to eliminate reference therein the claims, and to provide a brief description of the drawings. Accordingly, reconsideration and withdrawal of the objections to the disclosure in numbered sections 4 and 5 of the office action are requested.

Applicants have amended the abstract to be in proper form. Accordingly, reconsideration and withdrawal of the requirement in numbered section 3 of the office action are requested.

Applicants have amended the claims to more clearly define their invention. In particular, applicants have amended the claim 1 to eliminate the indefiniteness problem noted by the Examiner in numbered section 7 of the office action. Accordingly, it is submitted all of the claims now in the application comply with the requirements of 35 USC 112, second paragraph. Therefore, reconsideration and withdrawal of the rejection of claims 1 - 4 under 35 USC 112, second paragraph, are requested.

Applicants have also deleted the reference numerals from the claims and have added new claims 5-10. Claim 5 recites that the recess has a smaller cross-sectional area than the receiving space. See, Figures 1 and 2. Claims 6-10 are directed to a battery shutoff in a motor vehicle. See, e.g., page 3, lines 3-4 of applicants' specification.

Claims 1-4 stand rejected under 35 USC §103(a) as being unpatentable over United States Patent No. 4,224,487 to Simonsen in view of United States Patent No. 3,715,697 to Them. Applicants traverse this rejection and request reconsideration

thereof.

The present invention relates to a pyromechanical disconnecting device and to a battery shutoff in a motor vehicle, having, as shown by way of example only in Figures 1 and 2, a housing 4 in which there is arranged an electrically conductive conductor bus 2, which is fashioned so as to be severable at a predetermined cut position 1 by a cutting chisel 6 driven by a pyrotechnic charge. The conductor bus 2 is clamped on its side facing away from the cutting chisel 6 by a locking bolt 5 inserted into the housing 4, and a receiving space 15 is arranged in the locking bolt 5 in the region of the predetermined cut position 1, into which receiving space the cutting chisel 6 bends the region of the conductor bus 2 severed by it, and the locking bolt 5 forms an external surface of the housing 4. A recess 13 is arranged in the locking bolt 5, which recess transpiciously connects the receiving space 15 with the atmosphere.

The patent to Simonsen discloses a high speed, high impedance explosive circuit interrupter that attenuates the magnitude and duration of fault currents accompanying circuit faults in electrical circuits protected by conventional circuit isolation apparatus. The interrupter comprises a housing 2 having an internal cavity separated into longitudinally displaced upper and lower portions 19 and 17. Cutting element or blade 5 is slidably mounted within upper cavity 19 and is attached to plunger 4 which separates the cutting element from explosive charge 3. Signal transmission lines 1 enter the cavity into electrical communication with a detonator in the explosive charge from the top of the apparatus. Lower cavity 17 contains vent means 10 for rapidly equalizing pressure between that zone and the external pressure and allowing the escape of any gasses compressed in that zone.

As recognized by the Examiner, the Simonsen patent does not disclose a locking bolt as a separate unit inserted into the housing. In fact, contrary to the Examiner's allegation, Simonsen does not disclose a locking bolt at all. The lower cavity that receives the blade 5 is formed in the housing itself, not in a locking bolt. The interrupter of Simonsen does not include a locking bolt.

The Examiner alleges it would have been obvious to make a bolt as a separate unit, but cites only an older court decision as support for this allegation. This is not the type of objective evidence and specific factual findings necessary to establish the motivation to modify the teachings of applied references required to support a rejection under 35 USC §103. *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002). Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Here, the Examiner has not shown motivation to modify the interrupter of Simonsen to include a locking bolt to clamp the conductor either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

Moreover, while the Simonsen patent discloses a vent 10, the vent is not arranged in a locking bolt, and certainly does not *transpicuously* connect the lower

cavity 17 with the atmosphere. That is, one cannot easily see through the vent to determine whether the interrupter has been tripped.

The Them patent discloses a thermal fuse in which the terminal elements 11 and 12 are secured to the base 10 with rivets 13 and 14. Again, a locking bolt in which a receiving space for a chisel is arranged is not disclosed. The Examiner has cited Them for its teaching of the use of transparent disc 33. However, even the combined teachings of Simonsen and Them would not have suggested the use of locking bolt in which a receiving space for a chisel is arranged, much less such a locking bolt that also includes a recess arranged therein, which recess transpiciously connects the receiving space with the atmosphere.

For the foregoing reasons, the claims 1-4 are patentable over Simonsen and Them.

Applicants submit new claims 5-10 are also patentable over Simonsen and Them. Claim 5 is patentable at least for the reasons noted above. Claims 6-10 are directed to a battery shutoff in a motor vehicle. Neither Simonsen nor Them relates to a battery shutoff in a motor vehicle. Simonsen relates to a high speed, high impedance explosive circuit interrupter, e.g., for high speed computers that are not tolerant to circuit disruption or voltage transients. The Them patent relates to a thermal fuse. Thus neither patent would have suggested a battery shutoff in a motor vehicle as set forth in claims 6-10.

Applicants note the Examiner has cited a number of documents as being pertinent to applicants' disclosure. However, since these documents were not applied in rejecting claims formerly in the application, further discussion of these documents is

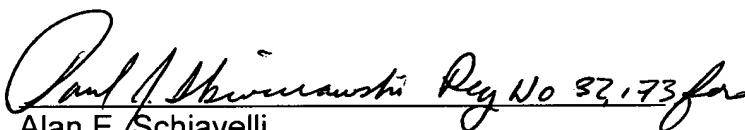
deemed unnecessary.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 306.43720X00) and please credit any excess fees to such deposit account.

Respectfully submitted,

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